

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Emergency Determination of Endangered Status for the Population of Woodland Caribou Found in Washington, Idaho, and Southern British Columbia**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Emergency rule.

**SUMMARY:** The Service determines as Endangered the population of woodland caribou, sometimes known as the southern Selkirk Mountain herd, found in extreme northeastern Washington, northern Idaho, and southern British Columbia. This isolated herd is the only population of caribou that still regularly occurs in the conterminous United States. An emergency rule is being issued because the caribou population has fallen to only 13 to 20 individuals, a level that probably cannot sustain the herd much longer. At least one or two adults and subadults are being lost each year, calf survival is apparently low, and there is evidently no immigration from other herds in Canada. The population is jeopardized by such factors as illegal hunting, habitat loss to timber harvesting (if not accomplished in accordance with proper guidelines) and wildfires, collisions with motor vehicles, and genetic problems through inbreeding. The premature death of even one more animal could mean the difference between survival and extinction for the herd. The precarious status of the herd is such that the Service deems it necessary to implement the protective provisions of the Endangered Species Act immediately. This emergency rule will apply to the caribou population for 240 days, during which time the Service intends to formally propose permanent Endangered status for the same population.

**DATES:** This emergency rule is effective on January 14, 1983, and expires on September 12, 1983.

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**SUPPLEMENTARY INFORMATION:****Background**

According to the most recent taxonomic work (Banfield, 1961; Hall, 1981), the reindeer of Eurasia and the caribou of North America belong to a single species, *Rangifer tarandus*. This species is divided into a number of subspecies, among which is woodland caribou (*Rangifer tarandus caribou*). This subspecies once occupied nearly the entire forested region from southeastern Alaska and British Columbia to Newfoundland and Nova Scotia. In the 48 conterminous States of the United States, populations are known to have occurred in Washington, Idaho, Montana, Minnesota, Wisconsin, Michigan, Vermont, New Hampshire, and Maine. Largely because of killing and habitat alteration by people, indigenous caribou disappeared from New England by about 1908 and from the Great Lakes States by 1940. A few individuals, probably wanderers from Canada, were observed in northeastern Minnesota in 1980-1981 (Mech, Nelson, and Drabik 1982). There had been no records in Montana since 1971, but in 1981, a lone animal was reportedly seen in the northwestern part of the State (Chadwick, 1982). This animal was probably also a wanderer from Canada and not a member of the herd that is the subject of this rule. There are still substantial numbers of woodland caribou in Canada, though populations there have been generally declining.

The only caribou population that still regularly occupies the conterminous United States is found in northern Idaho and northeastern Washington. This population, sometimes called the southern Selkirk Mountain herd, also occurs in southern British Columbia. The total approximate area of utilization is bounded as follows: Starting at the point where the Columbia River crosses the Washington-British Columbia border; thence northward along the Columbia River to its confluence with the Kootenay River in British Columbia; thence northeastward along the Kootenay River to its confluence with Kootenay Lake; thence southward along the Kootenay Lake and the Kootenai River, and across the Idaho-British Columbia border, to the town of Bonners Ferry, Idaho; thence southward along U.S. Highway 95 to the Pend Oreille River; thence westward and northward along the Pend Oreille River, and across the Idaho-Washington State line, to the Washington-British Columbia border; thence westward along the Washington-British Columbia border to the point of beginning. Any caribou within these boundaries are considered a part of the population which this rule classifies as endangered. It is possible, however, that portions of the herd may on occasion be found outside these geographical limits.

Early records suggest that in the 19th century, caribou were plentiful in the mountains of northeastern Washington, northern Idaho, northwestern Montana, and adjacent parts of southwestern Canada. As in the case of other big game animals of North America, unrestricted hunting probably had led to a major reduction of caribou numbers in this region by 1900. From that time until fairly recently, the numerical status of the southern Selkirk herd was not completely clear. Freddy (1974) thought that this herd probably contained fewer than 50 animals after 1900. Flinn (1956) and Evans (1960), however, estimated that there were still about 100 individuals in the population during the 1950's. In any event, there has been a sharp decline in recent decades, since estimates in the 1970's were about 20 to 30 caribou in the herd, and the latest data indicate a count of only 13 to 20.

In addition to the factors listed below, the decline and continued low numbers of the southern Selkirk herd apparently result from low calf survival and absence of immigration from other herds. The only source for immigrants is British Columbia, but there has been a general decline in woodland caribou in that province (British Columbia Ministry of Environment, 1981). Moreover, the southern Selkirk herd is separated from

other herds by barriers, such as Kootenay Lake and the human settlements in Kootenay Valley, and substantial distance. The nearest herd is about 30 miles away, on the east side of Kootenay Lake in southeastern British Columbia; it contains about 40 animals (Guy Woods, British Columbia Fish and Wildlife Branch, Ministry of Environment, Nelson, British Columbia, pers. comm.).

#### Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate 1982 amendments) set forth the procedures for adding species to the Federal list. The Secretary of Interior shall determine whether any species is an Endangered species or a Threatened species due to one or more of the five factors described in Section 4(a)(1) of the Act. These factors, and their application to the southern Selkirk Mountain population of woodland caribou, are as follows:

*A. The present or threatened destruction, modification, or curtailment of its habitat or range.* Surveys conducted in the 1950's revealed a population of approximately 50-100 woodland caribou in the southern Selkirks. Since then, the number has fallen to 13-20 animals. The decline was caused, in part, by past logging practices (including road construction) in the caribou's range.

Timber cutting can potentially affect caribou habitat by eliminating escape cover, migration corridors, and lichen production. Food availability is probably not now limiting this caribou population. However, if the population is to be restored to a viable level, estimated by the Forest Service to be about 100 animals, the production of lichens, the primary winter food, would probably have to increase. Timber management strategies would have to be developed which provide timber stands that optimize lichen production.

Currently, the U.S. Forest Service is utilizing caribou management guidelines to design timber sales in caribou habitat. These guidelines are intended to minimize the effects of logging on caribou and also to develop silvicultural prescriptions which may enhance habitat over the long run. Disease and insects, especially spruce bark beetles, are presently impacting timber stands within historic caribou habitat, thereby further complicating management. Salvage sales have taken place and others are planned to remove much of the diseased timber and reduce the

spread of bark beetles. Although these sales are being designed utilizing the caribou guidelines, studies and monitoring are necessary to evaluate the actual response of the caribou.

Timber harvesting may prove helpful in portions of caribou habitat by providing food and cover necessary for the survival of this population. For example, if caribou number eventually are limited by lack of food, and if selective tree removal could improve lichen production and availability, then moderate timber harvesting could be beneficial. However, at this time more information is necessary on the response of caribou to timber harvesting and managed timber stands. Timber harvesting, if not properly designed, can significantly impact caribou, especially in conjunction with the effects of poaching, highways, and forest roads. Listing of the caribou would place a higher priority on the acquisition of research funds to study caribou-timber management relationships.

Wildfire is a natural phenomenon in the range of the caribou. In the past, wildfire sometimes destroyed caribou cover and winter food. The caribou historically tolerated this natural adverse impact by itself. However, the cumulative effect of logging and wildfire has eliminated a great deal of the southern Selkirk herd's habitat.

*B. Overutilization for commercial, recreational, scientific, or educational purposes.* An important cause of the decline of the southern Selkirk caribou herd is human hunting, both legal (prior to 1957) and illegal (now and in the past). Caribou are relatively easy for hunters to approach and shoot. Poachers killed at least one animal from this population in 1980, 1981, and 1982 (B. S. Summerfield, U.S. Forest Service, Bonners Ferry, Idaho, pers. comm.). Poaching losses also occurred in previous years. The problem is greatest where the caribou frequent areas with good road access for hunters, for example, near Trans-Canada Highway No. 3. There are even more roads in the portion of the herd's range in the United States, and the potential for poaching is thus greater there. Fortunately, in the past decade, the herd has spent less time in the United States than in Canada. Had the reverse been true, U.S. caribou poachers might already have eliminated the herd. Finally, there is the possibility that licensed deer and elk hunters could accidentally shoot a caribou.

*C. Disease or Predation.* Disease is not known to significantly impact this caribou population. Certain predators, such as the coyote and black bear, occur

in moderate numbers in the range of the herd. They are capable of killing caribou calves and may occasionally do so. Other predators, including the gray wolf, grizzly bear, and mountain lion, are at such low number as to have no significant effect on the caribou. Recovery of wolf and grizzly populations (both on the U.S. List of Endangered and Threatened Wildlife) would probably not jeopardize the caribou population, if caribou habitat is preserved and restored.

**D. Inadequacy of existing regulatory mechanisms.** Much of the important caribou habitat in Idaho and Washington is on Federal (U.S. Forest Service) land. The Forest Service considers the Selkirk population of woodland caribou to be a "sensitive species." Forest Service policy (FSM title 2670.3) states that sensitive species are to be managed so as "to prevent their placement on Federal [Endangered or Threatened] lists." Also, U.S. Department of Agriculture policy (Secretary's memo No. 9500-3, July 20, 1982) states, in part, "habitats for all existing native and desired non-native plants, fish, and wildlife species will be managed to maintain at least viable populations of such species." Similar language appeared in previous Secretarial memoranda. The Forest Service has allowed considerable timber harvesting and road building to occur in old-growth forests within caribou habitat. Some of this timber cutting is having and will have adverse impacts on the Selkirk caribou. Further, the continued removal of old-growth lichen-bearing trees reduces the future opportunity for the caribou population to recover. This is especially serious because a Forest Service wildlife goal in the Northern Region (including Idaho and Montana) is for the caribou population to increase to 100 animals (letter of June 5, 1981, to the Fish and Wildlife Service from Acting Associate Deputy Director, U.S. Forest Service).

The U.S. Forest Service is preparing overall forest management plans for the Colville and Idaho Panhandle National Forests. Those plans will incorporate caribou habitat management. However, the degree to which those plans are followed will be subject to administrative discretion. As seen with the policies on sensitive species, it is sometimes very difficult for forest supervisors to protect caribou habitat in the face of timber quotas, disease outbreaks, and the public's desire for recreational access. The Endangered Species Act will provide additional protection for this species, through

Section 7 (interagency cooperation) requirements.

**E. Other natural or manmade factors affecting its continued existence.** Two other factors affect the abundance of this population. Occasionally caribou are killed in collisions with vehicles along Trans-Canada Highway No. 3 at Kootenay Pass, about 5 miles north of the international boundary. Although no highways exist in the U.S. portion of the population's primary habitat, there is a potential for caribou-vehicle collisions in caribou habitat on U.S. Forest Service road used by loggers, miners, and recreationists. Vehicle collisions with deer are known to occur on these roads, so it is reasonable to assume that caribou collisions could occur too. As the number of forest roads and subsequent traffic increases, the threat to caribou of such collisions will increase.

Caribou are by nature wandering animals. Where there are viable caribou herds, a few individuals migrate from one herd to another each year. This tends to equalize caribou "pressure" on the habitat and allows for genetic interchange between herds. As noted above, however, immigration to the southern Selkirk population is apparently not occurring, and the number of caribou in herds closest to the southern Selkirk population is declining. The lack of natural augmentation to the population causes the herd to rely on inbreeding for recruitment and reduces the genetic variability of the offspring. Reduced genetic variability reduces the capacity of animals to adjust to changing environmental conditions and results in less vigorous individuals.

#### Critical Habitat

Section 4(a)(3) of the Endangered Species Act requires the Service to designate the Critical Habitat of a species, concurrent with listing, "to the maximum extent prudent and determinable." In the case of the southern Selkirk Mountain herd of woodland caribou, the Service considers that no designation of Critical Habitat is prudent. Such a designation would require publication and extensive publicity of the precise areas occupied by the herd and the kind of habitat utilized. There thus would be a serious risk of facilitating illegal hunting. As the loss of even a single animal could be disastrous to the herd, this risk should be avoided.

#### Reasons for Emergency Determination

The southern Selkirk Mountain population of woodland caribou has become the most critically endangered mammal in the United States, but only

within the last few months has the full severity of the situation become apparent. In the *Federal Register* of February 9, 1981 (46 FR 11567-11568), the Service published a notice accepting two petitions to add the population to the U.S. List of Endangered and Threatened Wildlife, and announced its intention to issue a proposal to this effect. At that time, the population was estimated to contain 20 to 30 individuals, about the same as during the previous decade.

Since the notice was published, evidence has accumulated that the status of the southern Selkirk herd has deteriorated badly. The latest field data indicate an actual count of only 13 individuals of all ages in the herd, though there may be a few more animals that were not counted. Such a population size is far below the minimum necessary to insure survival in the face of natural contingencies, even disregarding the host of human-caused problems described above. Moreover, small population size, along with lack of genetic exchange with other populations, leads to inbreeding. This factor reduces adaptiveness, viability, and fecundity, and may result in extinction. Recent studies suggest that the minimum genetically effective size of a population is 50 individuals (Franklin, 1980; Soule, 1980). Other studies have shown that inbreeding in populations of various species of hoofed mammals, including *Rangifer tarandus*, is associated with significant increase in juvenile mortality (Ralls, Brugger, and Ballou, 1979). Such a condition could be responsible for low calf survival in the southern Selkirk population.

Additional losses, even the premature death of a single animal, could be disastrous, and yet the potential for such losses is great and increasing. Habitat disruption, especially with respect to logging activity is continuing without full consideration of the needs of the caribou.

Poaching occurs regularly; in the most recent known case, a mature female was shot on the Canadian side of the border in October 1982. Existing regulations have not been effective in either stopping poaching or preventing serious habitat disturbance. Roads continue to be constructed in caribou range, allowing greater access for hunters and setting up possible collisions between vehicles and caribou. Johnson (1976) suggested that a single accident along an icy winter road, where the caribou have gathered to feed on salt, could wipe out a significant part of the herd.

Any of these problems could at any time result in losses that would be

irreversible and reduce the herd to a point at which recovery is no longer feasible. The Service considers that all available protective measures should be instituted immediately in an effort to prevent such losses, and that full-scale recovery planning should also begin as soon as possible. Therefore, this determination of Endangered status for the caribou is being issued on an emergency basis.

#### Effects of This Rule

Endangered species regulations already published in Title 50, § 17.21, of the Code of Federal Regulations set forth a series of general prohibitions and exceptions which apply to all Endangered wildlife. These prohibitions, in part, will make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale any member of the southern Selkirk population of woodland caribou in interstate or foreign commerce. It also will be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions will apply to agents of the U.S. Fish and Wildlife Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving Endangered wildlife under certain circumstances. Regulations governing such permits are codified at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes or to enhance the propagation or survival of the species or population. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available.

Subsection 7(a) of the Endangered Species Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as Endangered or Threatened. This rule requires Federal agencies to satisfy their statutory obligations relative to the southern Selkirk Mountain population of caribou. Since this population is now being added to the List of Endangered and Threatened Wildlife, Federal agencies will be immediately required to insure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of the population.

Listing the southern Selkirk caribou as Endangered will change the management emphasis that agencies place on the population. Listing will further emphasize the national

significance of this population. The combination of legal requirements and increased national awareness will produce a number of advantages for the caribou.

First, as indicated above, all Federal actions that may affect the caribou population will come under the purview of the Endangered Species Act. Since most of the range of the population in the United States is within national forests, and since logging activities therein are having impacts on caribou habitat, it is anticipated that some actions authorized, funded, and carried out by the U.S. Forest Service will be affected by this rule. Such effects should not be major, however, since the Forest Service is already attempting to manage its lands with consideration of the caribou's welfare. Moreover, this rule will allow more control of the actions of other agencies on national forests, and thus give the Forest Service a greater capability than it now has to manage habitat for the benefit of the caribou. For example, the Forest Service has no legal control over its own lands with respect to construction of power lines by the Bonneville Power Administration, and the issuance of permits and leases for mineral development by the Bureau of Land Management. Henceforth, such actions would require consultation with the Fish and Wildlife Service to insure that they are not likely to jeopardize the caribou population.

Second, listing the caribou as Endangered will bring Section 6 of the Endangered Species Act into effect. Therefore, the Fish and Wildlife Service will be able to grant funds (when they become available) to the States of Idaho and Washington for management actions aiding the protection and recovery of the caribou.

Third, the agents of the Service's Division of Law Enforcement can be assigned to enforce the Act's prohibitions against taking. A law enforcement strategy plan can be developed. Without such protection, these agents could only be used if an illegally taken carcass or its parts were transferred in interstate or foreign transportation or commerce.

Fourth, listing the population under the Act will provide for the development of a caribou recovery plan. Such a plan would draw together agencies (U.S. and Canadian) having responsibility for caribou conservation. The plan would establish an administrative framework, sanctioned by the Act, for agencies to coordinate activities and cooperate with each other in conservation efforts. The plan would set recovery priorities and estimate the cost of various tasks necessary to accomplish them. It would

assign appropriate functions to each agency and a timeframe within which to complete them. The plan would establish a formal blueprint for periodic task review. Each agency may now have its own program for caribou management. These programs would be consolidated and modified into one overall recovery plan that would give consideration to all factors needed for caribou conservation.

Fifth, the U.S. State Department could become involved on behalf of the Fish and Wildlife Service. For example, the State Department could encourage Canadian law enforcement agencies to improve surveillance for poachers seeking caribou in the southern Selkirk population. In addition, the State Department could help to encourage Canadian and provincial government agencies to give special consideration to this caribou population when they propose dams, highways, timber sales, etc. in the Canadian part of the herd's habitat. Because Canada has other herds of woodland caribou, the southern Selkirk population has not received the same priority as it does in the United States. Listing it as Endangered may enhance international cooperation.

#### National Environmental Policy Act

A draft Environmental Assessment will be prepared when the southern Selkirk Mountain population of woodland caribou is formally proposed for permanent addition to the U.S. List of Endangered and Threatened Wildlife. At the time such a rule is made final, a determination will be made as to whether this is a major Federal action which could significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969 (implemented at 40 CFR Parts 1500-1508).

For the reasons described above, the Department has determined that the listing responds to an emergency situation, and that the procedures prescribed by Executive Order 12291 do not apply. Applicable provisions of the order will be followed during the development of any proposed and final rules under 16 U.S.C. 1531 *et seq.* In addition, consideration of this rule's effects upon small entities, as required by the Regulatory Flexibility Act (5 U.S.C. 601), will be made during the development of such proposed and final rules.

#### Author

The primary author of this rule is James A. Nee, U.S. Fish and Wildlife

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#### References

- Banfield, A.W.F. 1961. A revision of the reindeer and caribou, genus *Rangifer*. National Museum of Canada Bulletin, Biological Series, No. 66, 114 pp.
- Bergerud, A.T. 1974. Decline of caribou in North America following settlement. *Journal of Wildlife Management* 38(4):757-70.
- Bergerud, A.T. 1978. Caribou. In Schmidt, J.L., and D.L. Gilbert (editors), *Big game of North America: ecology and management*. Stackpole Books, Harrisburg, Pennsylvania, pp. 82-101.
- British Columbia Ministry of Environment. 1981. Woodland caribou in the Thompson-Nicola Resource Region. A report of the Raft-North Thompson Steering Committee, 18 pp.
- Carlton J. 1982. Last chance for the caribou. *Idaho Wildlife* 3(3):14-19.
- Chadwick, D.H. 1982. Caribou south of the border? *National Wildlife*, 20(5):40-2.
- Evans, H.F. 1960. A preliminary investigation of caribou in the northwestern United States. M.S. Thesis, Montana State University, Missoula, 145 pp.
- Flinn, P. 1956. Caribou of Idaho. Unpublished report, Idaho Department of Fish and Game, Boise, 72 pp.
- Franklin, I. R. 1980. Evolutionary change in small populations. In Soulé, M. E., and B. A. Wilcox (editors), *Conservation biology*. Sinauer Associates, Inc., Sunderland, Massachusetts, pp. 135-149.
- Freddy, D. J. 1974. Status and management of the Selkirk caribou herd, 1973. M.S. Thesis, University of Idaho, Moscow, 132 pp.
- Freddy, D. J. 1979. Distribution and movements of Selkirk caribou, 1972-74. *Canadian Field-Naturalist* 93(1):71-74.
- Hall, E. R. 1981. *The mammals of North America*. John Wiley & Sons, New York, 2 Vols.
- International Mountain Caribou Technical Committee. 1982. Mountain caribou in the Selkirk Mountains of Idaho, Washington, and British Columbia. Idaho Department of Fish and Game, 6 pp.
- Jerry, D. 1982. Mountain caribou: status and research summary. Unpublished Report, U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene, 26 pp.
- Johnson, D. R. 1976. Mountain caribou: threats to survival in the Kootenay Pass region, British Columbia. *Northwest Science* 50(2):97-101.
- Johnson, D. R. and D. R. Miller. 1979. Observations on reproduction of mountain caribou. *Northwest Science* 53(2):114-117.
- Layser, E. F. 1974. A review of the mountain caribou of northeastern Washington and adjacent northern Idaho. *Journal of the Idaho Academy of Science, Special Research Issue*, No. 3, 63 pp.
- Mech, L. D., M. E. Nelson and H. F. Drabik. 1982. Reoccurrence of caribou in Minnesota. *American Midland Naturalist* 108(1):206-208.
- Ralls, K., K. Brugger, and J. Ballou. 1979. Inbreeding and juvenile mortality in small populations of ungulates. *Science* 206(4422):1101-03.
- Soulé, M. E. 1980. Thresholds for survival: maintaining fitness and evolutionary potential. In Soulé, M. E., and B. A. Wilcox (editors), *Conservation biology*. Sinauer Associates, Inc., Sunderland, Massachusetts, pp. 151-169.

#### List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

#### Regulation Promulgation

### PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

Accordingly, until September 12, 1983, Part 17 of Title 50 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 17 reads as follows:

**Authority:** Pub. L. 93-205, 87 Stat. 884; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1241; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531, et seq.)

2. Section 17.11(n) is amended by adding the following, in alphabetical order, to the List of Endangered and Threatened Wildlife:

#### § 17.11 [Amended]

\* \* \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Caribou, woodland.....	<i>Rangifer tarandus caribou</i> .....	Canada, U.S.A. (AK, ID, ME, MI, MN, MT, NH, VT, WA, WI).	Canada (that part of southeastern British Columbia bounded by the Canada-U.S.A. border, Columbia River, Kootenay River, Kootenay Lake, and Kootenai River), U.S.A. (ID, WA).	E.....	.....	N/A.....	N/A.

(Emergency Determination of Endangered Status for the Population of Woodland Caribou in Washington, Idaho, and southern British Columbia)

Dated: January 11, 1983.

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Assistant Secretary for Fish and Wildlife and Parks.

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